

## PROJECT DESCRIPTION

## GENERAL

THIS PORTION OF THE PROJECT INVOLVES RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL FOR PHASE II MAINTENANCE OF TRAFFIC PLANS AT THE INTERSECTION OF MD 201 AND MD 212 IN PRINCE GEORGES COUNTY. MD 201 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

## INTERSECTION OPERATION

DURING PHASE II, THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, PRE-TIMED MODE WITH THE MD 201 APPROACHES OPERATING CONCURRENTLY AND THE MD 212 APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASES WILL BE PROVIDED ON THE NORTHBOUND MD 201 AND WESTBOUND MD 212 APPROACHES.

## CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE AND THREE (3), FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

## SPECIAL NOTE

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

## MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-12

STANDARD NO. MD-104.31-01 (FLAGGING OPERATION)

STANDARD NO. MD-104.33-01 (SHOULDER WORK)

STANDARD NO. MD-104.35-02 (LANE SHIFT)

STANDARD NO. MD-104.32-02 (INTERSECTION FLAGGING OPERATION)

## PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. CHARLES WATKINS  
DISTRICT ENGINEER  
PHONE: (301) 513-7311

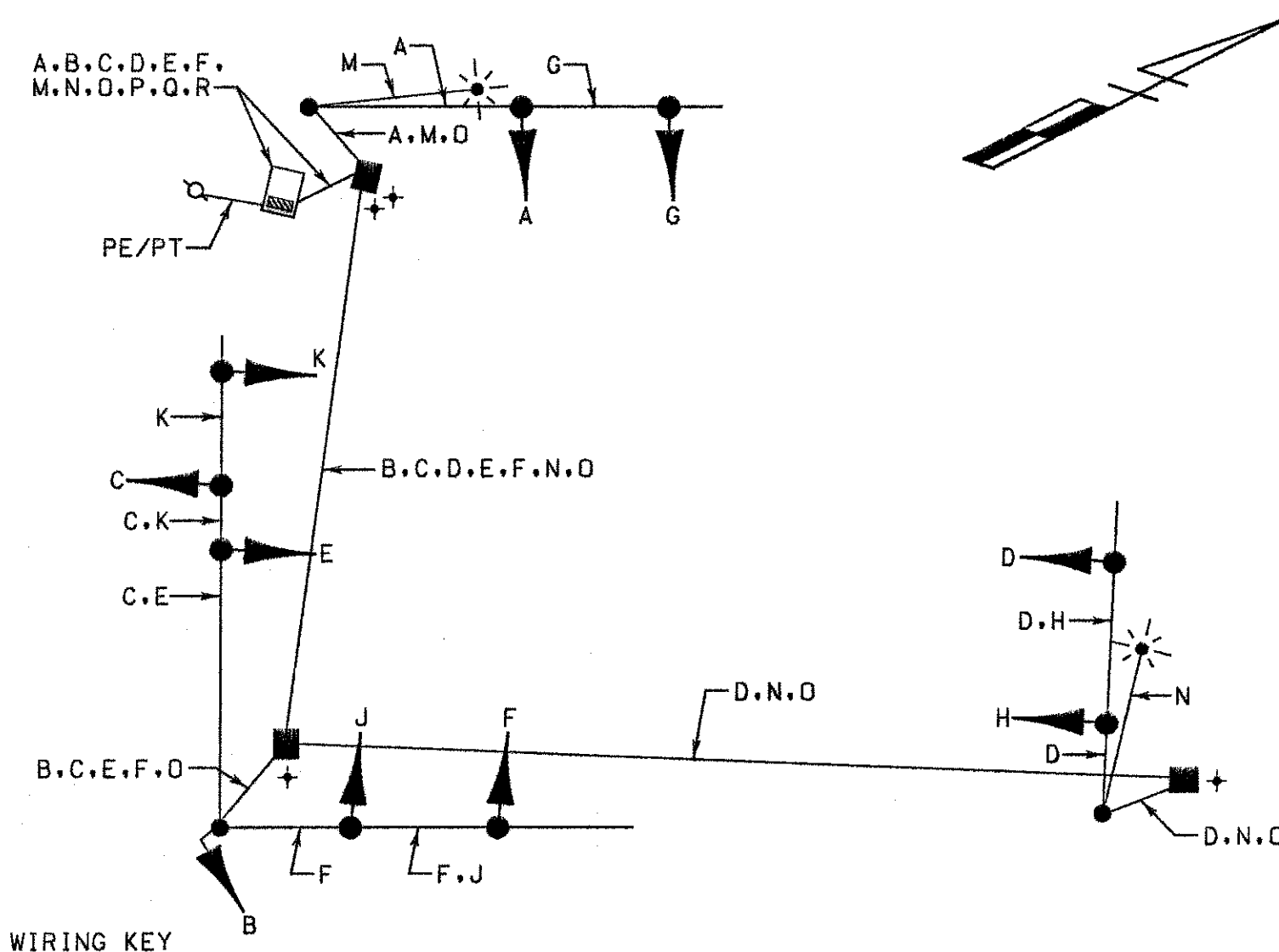
MR. MAJIB SHAKIB  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 513-7358

MR. RANDY BROWN  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7304

MR. JOE GECKLE  
DISTRICT UTILITIES ENGINEER  
PHONE: (301) 513-7350

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

## WIRING DIAGRAM



## EQUIPMENT LIST "A"

## A. EQUIPMENT TO BE SUPPLIED BY SHA

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
900000	3 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
900000	1 EACH	8 IN./12 IN., ONE-WAY, FIVE-SECTION (R.Y.YA.G.GA) TRAFFIC SIGNAL HEAD - SIDE OF POLE MOUNT.
900000	1 EACH	8 IN./12 IN., ONE-WAY, FIVE-SECTION (R.Y.YA.G.GA) TRAFFIC SIGNAL HEAD - MAST ARM MOUNT.
960022	6 EACH	12 IN., ONE-WAY, THREE-SECTION (R.Y.G) TRAFFIC SIGNAL HEAD - MAST ARM MOUNT.
960028	2 EACH	12 IN., ONE-WAY, FIVE-SECTION (R.Y.YA.G.GA) TRAFFIC SIGNAL HEAD - MAST ARM MOUNT.
971017	1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.
973023	124 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :

- 2 EACH R10-12 SIGN (36 IN. X 42 IN.) - MAST ARM MOUNT.
- 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 212, LEFT ARROW" (30 IN. X 51 IN.) - POLE MOUNT.
- 1 EACH ASSOCIATED SHIELD ASSEMBLY "WEST, MD 212, RIGHT ARROW" (30 IN. X 51 IN.) - GROUND MOUNT.
- 1 EACH ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 201, RIGHT ARROW" (30 IN. X 51 IN.) - POLE MOUNT.
- 1 EACH ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 201, LEFT ARROW" (48 IN. X 75 IN.) - POLE MOUNT.
- 4 EACH D-3(1) SIGN (VARIABLE X 16 IN.) DUAL FACED - MAST ARM MOUNT.

## PHASE CHART

	1	2	3	4	5	6	7	8	9	10
PHASE 1 + 6	G	G	G	R	R	R	R	R	R	R
1 + 6 CHANGE	G	G	G	R	R	R	R	R	R	R
PHASE 2 + 6	G	G	G	G	G	R	R	R	R	R
2 + 6 CHANGE	Y	Y	Y	Y	Y	R	R	R	R	R
PHASE 3 + 8	R	R	R	R	R	R	R	G	G	G
3 + 8 CHANGE	R	R	R	R	R	R	R	G	G	G
PHASE 4 + 8	R	R	R	R	R	G	G	G	G	G
4 + 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

## EQUIPMENT LIST "B"

## B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
120500	LUMP SUM	MAINTENANCE OF TRAFFIC
120610	3 U.D.	ARROW PANEL
130850	LUMP SUM	MOBILIZATION
203030	4 C.Y.	TEST PIT EXCAVATION
801004	13 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
801106	18 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS (4 IN. X 6 IN.)
802501	300 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE
805155	230 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
810010	45 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO. 4 A.W.G. - THHN/THWN
811001	8 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
813014	11 S.F.	INSTALL GROUND MOUNTED SIGN
813015	113 S.F.	INSTALL OVERHEAD SIGN
831010	2 EACH	FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL
837001	4 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER X 10 FT.
838003	1 EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT (120/240V, 1 PHASE 3 WIRE SYST)
861107	100 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
861108	1100 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
861116	420 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
866104	2 EACH	FURNISH AND INSTALL 20 FT. LIGHTING BRACKET FOR TRAFFIC SIGNAL STRUCTURE
871117	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	630 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	20 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	115 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
800000	10 EACH	INSTALL SIGNAL HEAD (ANY TYPE)
800000	LUMP SUM	REMOVAL AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT
800000	LUMP SUM	REMOVAL OF EXISTING SIGNAL EQUIPMENT TO BE SALVAGED
800000	LUMP SUM	DELIVERY OF SALVAGED SIGNAL EQUIPMENT AND MATERIAL
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH 50 FT./60 FT. MAST ARMS
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH 50 FT. MAST ARM
800000	1 EACH	FURNISH AND INSTALL 27 FT. STEEL POLE WITH 38 FT. MAST ARM

## PHASE II



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION SHEET  
MD 201 (EDMONSTON ROAD) &  
MD 212 (POWDER MILL ROAD)



Whitman, Requardt  
and Associates, LLP  
2315 Saint Paul Street  
Baltimore, Maryland 21218  
(410) 235-3450

## REVISIONS

## APPROVALS

ASST. TRAFFIC ENGINEERING DESIGN DIVISION

ASST. DISTRICT ENGINEER, TRAFFIC

CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

DIRECTOR, TRAFFIC & SAFETY

DRAWN BY: S.BLOSS  
CHECKED BY: N.LEARY  
SCALE: NONE  
DATE: 9-10-99

F.A.P. NO.  
S.H.A. NO.  
COUNTY: PRINCE GEORGES  
LOG MILE:

TS NO.  
TS-684C  
T.I.M.S. NO.  
SHEET NO.  
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